1958-5 DIVISION ACTIVITIES FEBRUARY 1958

JOURNAL of the

Sanitary Engineering Division

PROCEEDINGS OF THE



AMERICAN SOCIETY

OF CIVIL ENGINEERS

DIVISION ACTIVITIES SANITARY ENGINEERING DIVISION

Proceedings of the American Society of Civil Engineers

NEWS

February, 1958

Philadelphia Section, ASCE, Establishes Hydraulic and Sanitary Engineering Division

A Hydraulic and Sanitary Engineering Division has been established within the Philadelphia Section, ASCE. The first official meeting was held at the Engineer's Club on September 19, 1957. Walter A. Lyon, Chairman of the Temporary Executive Committee, presided.

Two classes of membership have been established. These are:

- Members—Engineers and others engaged in or interested in hydraulic and sanitary engineering who belong to the American Society of Civil Engineers.
- Affiliate Members—Engineers and others engaged in or interested in hydraulic and sanitary engineering who do not belong to the American Society of Civil Engineers.

The newly elected officers include: Elwood L. Bean, Chairman; Romeo A. Falciani, Vice Chairman; and Walton Purdom, Secretary.

Committee on Publications Has New Chairman

Professor I. W. Santry, Jr., of Southern Methodist University, has recently accepted the chairmanship of the Sanitary Engineering Division Committee on Publications, His appointment fills the vacancy created by the resignation of Dr. Ross McKinney of M.I.T., who served Division members with a high level of ability and enthusiasm during his tenure as chairman. Dr. McKinney's absence will be keenly felt, but the Division is fortunate in securing an engineer and educator of Professor Santry's qualifications for this important post.

Born in El Paso, Texas, Professor Santry attended both the University of California and Southern Methodist University. Following graduation in 1940, he worked for the California Division of Highways, San Francisco Office of the National Bureau of Standards, California Water Service Company and the City of Oakland, before joining the faculty of Southern Methodist University. He is a registered professional engineer and has carried on a varied-type of consulting practice in addition to his teaching responsibilities. His interests have reached beyond professional engineering and he holds positions of leadership in the Boy Scouts of America and his church. Awarded the Texas Section,

Note: No. 1958-5 is part of the copyrighted Journal of the Sanitary Engineering Division, Proceedings of the American Society of Civil Engineers, Vol. 84, SA 1, February, 1958.

ASCE, Award of Honor in 1955 and its Certificate of Appreciation in 1956, Professor Santry has been very active in ASCE and other professional sani-

tary engineering societies.

Because of the importance of the technical literature to the sanitary engieer's professional development, the success of the Committee is the personal responsibility of each and every member of the Division. The number and quality of the papers appearing in the Journal reflect the technical advances being made by that segment of the sanitary engineering profession allied with the Society. The Committee must depend upon the individual members of the Division for these papers and it is in this realm of activity that each engineer has an opportunity to enhance his personal and professional group reputation. Let's get behind the new chairman and give him the kind of support he must have if he is to make a success of his new and most important task.

Did You Know That

Dr. Nelson L. Nemerow, Chairman of our Division Research Committee, has accepted a new position as Professor of Civil Engineering at Syracuse University in Syracuse, New York. This new position involves teaching and research in sanitary engineering and became effective on February 1, 1958. Dr. Nemerow has served in the capacity of Associate Professor of Civil Engineering at North Carolina State College in Raleigh, North Carolina. He has authored some 40 technical papers and has specialized in the field of industrial waste treatment.

The September 19, 1957, issue of the Engineering News-Record summarized a recent report of an analysis of the engineering profession. The report, "A Profile of the Engineer," was prepared by the industrial relations consultants, Deutsch and Shea, Inc., of New York, and published by Industrial Relations News. Its disclosures are not altogether encouraging, but provide much food for thought. The typical engineer is pictured as a strongly work-oriented, precise, tense, energetic, practical individual with little interest in intangible questions, little vision beyond the immediate problem, and little perception for subtle complexities. The lack of creativeness of engineers as a group is reportedly offset to some extent by the research engineer who is cited as being more theoretical and specialized than his more practical colleagues, more creative, enthusiastic, impulsive, and independent.

Howard E. Moses, Director of the Division of Sanitary Engineering, Pennsylvania State Department of Health, and nationally-recognized as a pioneer in clean streams programs died November 13, 1957. Among the honors and awards which have been bestowed on Mr. Moses for his achievements were an Honorary Degree of Doctor of Science from Dickinson College, the Fuller Award of the American Water Works Association, and an Award of

Merit from the Pennsylvania Public Health Association.

Edward P. Sellner has been appointed Manager of the Conservation Bureau of the Portland Cement Association effective December 1, 1957. He succeeds Ezra Wenger, who is retiring after 24 years with the Association and who has been Manager of the Conservation Bureau since it was established in 1946. Mr. Sellner joined the Association in 1955 as sanitary engineer in the Conservation Bureau. Prior to this, he served as an engineer in the Public Health Service and taught both civil and sanitary engineering subjects at the University of Oklahoma, University of Kansas, and at Texas A & M College. He

is a graduate of the Case Institute of Technology and Harvard University.

Leo Weaver, formerly a Senior Sanitary Engineer with the Public Health Service and chief of its refuse sanitation unit in Washington, D. C., has accepted an appointment as Research Director, American Public Works Association, Chicago, Illinois.

Robert O. Sylvester, Professor of Sanitary Engineering, University of Washington, was awarded the Bedell Award for outstanding service to the Pacific Northwest Sewage and Industrial Wastes Association. At the same meeting of the Association, Andrew J. Wahl was awarded the Hatfield Award. R. Trumbull Smith, Marvin W. Runyan, and Gilbert H. Dunstan were elected president, vice-president, and secretary-treasurer, respectively, of the Association for 1958.

Professor Harvey Wilke, Purdue University, reports that the quotation in the October issue of the Journal from the American Scientist relative to a poll of students by the Purdue Opinion Panel in 1956 has turned up in print before and is misleading. The Panel Director has informed him that the poll was actually of high school students and not of Purdue Students—not even freshmen. The Editor is happy—and relieved—to be able to add this note of clarification.

Sanitary Engineering Education

Education, Training and Utilization of Sanitary Engineers

On October 4, 1957, the Committee on Sanitary Engineering and Environment, Division of Medical Sciences, National Academy of Sciences, National Research Council, approved for public release their report on the Education, Training and Utilization of Sanitary Engineers. This report summarizes the conclusions reached in a conference held in Washington on March 6-7, 1957, to which conference the members of the Joint Committee for the Advancement of Sanitary Engineers were invited participants.

Copies of this report may be obtained from the Chief, Office of Sanitary Engineering Resources, Division of Sanitary Engineering Services, Public Health Service, Department of Health, Education and Welfare, 330 Independence Avenue, Washington, D. C., at no cost. The report is thought provoking and timely reading for all sanitary engineers. The official summary is reproduced as follows:

"Advances in medical science have stimulated the development of new scientific research areas, resulting in the growth of sanitary engineering as a field dedicated to the preservation of health through environmental controls.

Sanitary engineers are now to be found in such major activity areas as public works, industry, public health, the armed services, private practice, research, and teaching. Among the new and/or expanding areas of responsibility and concern of the sanitary engineer are water resources management; community planning; radiological health; atmospheric pollution; chronic disease prevention; food protection, processing, and equipment technology; the environment of under-developed areas of the world; and accident prevention.

In order to alleviate the critical shortage and recruit in both numbers and quality, the work of sanitary engineers must be given wide publicity by individual engineers and appropriate professional bodies, in and out of Government.

Particular attention should be given to establishing and/or expanding traineeships, fellowships, scholarships, research assistantships, and other forms of financial assistance to interested and qualified students at the undergraduate and graduate levels, and to graduate programs of institutions of higher education. To this end, special effort should be devoted to securing expansion of Title I of Public Law 911.

The education of sanitary engineers to date has disclosed some discrepancies. Undergraduate sanitary engineer options within civil engineering curricula frequently result in deficiencies in chemistry and biology. The Conference recommends a 5-year program, involving 4-year undergraduate civil engineering curricula and professional specialization in the fifth year leading

to the Master's degree.

Specific recommendations include: undergraduate mathematics to extend through differential equations; chemistry to include organic and physical chemistry and introductory biochemistry; transfer and rate mechanisms to include introductory chemical and biochemical rate mechanisms; a 1-year Master's degree program leading to practice in Public Health, Water Works, and Waste Disposal Works, Industrial Hygiene, Radiological Health, or Air Pollution Control; about 25 per cent of the Master's degree in sanitary engineering to be devoted to required courses in General Environmental Hygiene, Engineering Statistics, and Epidemiology."

Sanitary Engineering Department Established at Walter Reed Army Medical Center

A Department of sanitary engineering has recently been created in the Preventive Medicine Division of the Walter Reed Army Medical Center. The department is headed by Colonel Stanley J. Weidenkopf. The primary responsibility of this department at present will be instructing medical and related professional personnel in sanitary engineering. Some research activities are contemplated at a future time.

Education in Sciences Stimulated by Sanitary Engineering Research Facility

The Public Health Service has announced that a group of high school science administrators and teachers is working with the staff of its Robert A. Taft Sanitary Engineering Center in Cincinnati with a view to adapting some of the research practices there to laboratory exercises in the classroom. The Cincinnati research facility is concerned with water and air pollution, radiological hazards and other environmental factors. It employs many advanced research techniques which may prove helpful in updating the teaching of physics, chemistry, biology and other sciences.

The demonstrations and experiments are being pilot-projected by the teachers in their classrooms, and will then be published in the pages of <u>The Science Teacher</u>, official journal of the National Science Teachers Association; under whose auspices this project is being carried out. Mr. Robert Carleton, Executive Secretary of the Association, has indicated that reprints of the exercises will be mailed to thousands of science teachers throughout the

country.

Sanitary Engineering Research

Sanitary engineering depends upon research as a building depends upon its foundation and as an apple depends on its core. Without the foundation and the core the building and the apple would be totally inadequate. Similarly, without research sanitary engineering would become antiquated and undependable. Research is the foundation for the future of sanitary engineering.

Your Sanitary Engineering Division Research Committee attempts to "bridge the gap" between research and design. Design engineers often have a difficult time interpreting research papers. Researchers also experience some inability to evaluate their results objectively and project them into design facilities. The Research Committee endeavors to:

- 1. Stimulate needed research,
- 2. Ferret out new and valuable research efforts,
- Summarize these in the form of a report presented at meetings and/or published as Proceedings Papers in the Journal, and
- Evaluate with a view towards engineering design the implications of the research.

The current Committee is composed of eight active members, each serving as Head of a separate section of sanitary engineering. Each is a recognized leader in his particular field and is currently active in his own work in these areas. They are:

- C. H. Hull, Head Water Section Department Sanitary Engineering, Johns Hopkins University Baltimore 18, Maryland
- E. R. Hendrickson, Joint Head, Air Pollution Section Department of Civil Engineering, College of Engineering University of Florida, Gainesville, Florida
- W. I. Ingram, Joint Head, Air Pollution Section 20 Point Crescent, Whitestone 57, New York
- H. A. Faber, Head, Public Health Section U. S. Public Health Service, Dept. H.E.W. Division of Sanitary Engineering Services Washington, D. C.
- Ralph Stone, Head, Solid Waste Section 147 San Vicente Boulevard, Beverly Hills, California
- M. A. Churchill, Head Stream Pollution Section Tennessee Valley Authority, 725 Edney Bldg., Chattanooga, Tenn.
- R. H. Bogan, Head, Sewage Section 201 More Hall, University of Washington, Seattle 5, Washington.
- 8. N. L. Nemerow, Head, Industrial Waste Section and Chairman of Committee

Civil Engineering Department, Syracuse University Syracuse 10, New York

These men urgently need your assistance and cooperation in carrying out their objectives. They request that you communicate directly with them concerning research that you wish to undertake or current research now under way. They will assist you to locate a sponsor, provide a suitable outlet for your research, and evaluate the data constructively. The fact that the Committee may see fit to publish your results in a summarized and evaluated form

will not stand in the way of publication of the entire data in a journal of your choice. In fact, the reporting by the Committee may enhance its publication in several journals.

In addition, your News Section will keep you informed about the nature and location of research activities.

Your Committee encourages you to consider each of them as advisors on research problems of any nature. They are your representatives. Don't fail to take advantage of this service the Division is providing.

 Nelson L. Nemerow, Chairman

University of North Carolina Awarded A.E.C. Research Grant

The Department of Sanitary Engineering of the University of North Carolina has been awarded a grant by the Atomic Energy Commission for the purpose of equipping a laboratory for teaching and research investigations using radio-isotopes.

Among the early uses to which this laboratory will be put are the teaching of a laboratory-lecture course on "Radioactivity in Water, Food and Air," and in the conduct of a seminar on "Radiation and Public Health."

Cooperative Study to Develop More Effective Filtration of Lake Michigan Water

The problem of poor sedimentation and short filter runs, primarily due to the presence of nuisance organisms and other adverse water-qualify factors, has resulted in the initiation of a project to develop more effective filtration of Lake Michigan water. A committee formed by the West Shore Water Producers Association and the State Departments of Health of Wisconsin, Illinois, Indiana, and Michigan, has requested that sanitary engineers of the Public Health Service's Regional Office in Chicago conduct the study with the cooperation and support of Professor Merrill Gamet and the Sanitary Engineering Department of Northwestern University.

The objectives of the study are: (1) to determine the adverse effects of short filter runs due to nuisance organisms; (2) to identify the water-quality conditions which contribute to the aforementioned problem; (3) to evaluate the methods used by the plants to cope with these treatment problems; and (4) to determine improved treatment methods for Lake Michigan water when adverse conditions exist so as to provide a more satisfactory operating cycle and a greater assurance of being able to continue to meet the water demands

placed upon the facilities.

A list of seventeen water plants treating Lake Michigan water was presented at a planning conference in Chicago on June 27, 1957, by the Committee of the West Shore Water Producers Association and the cooperating State Boards of Health as possible plants to be studied. These plants were selected by the committee on the basis of geographical location, size, type, and personnel. The seventeen plants were surveyed by Mr. John Rademacher of the Public Health Service and Professor Merrill Gamet of Northwestern University during the period of July 1, 1957, to October 1, 1957. As a result of an analysis of the data collected, twelve water treatment plants were selected to participate in the study. The information collected included detailed descriptions of plant unit design and laboratory facilities, plant personnel, type and availability

of past operating data and representative filter sand samples. Of the twelve plants selected, three each are located in Wisconsin and Illinois, two are in Indiana, and four are on the east shore of Lake Michigan, in the State of Michigan.

A short course was presented at Northwestern University on December 4, 5 and 6, 1957, to acquaint the operating personnel of the participating plants with the laboratory techniques and test procedures to be used in the study. The methods were selected by the Committee as being those which would produce acceptable accuracy and consistency between plants for correlation of study data. The principal speakers at the short course included Dr. C. M. Palmer, Algologist at the Public Health Service's Robert A. Taft Sanitary Engineering Center; Mr. John R. Baylis, Engineer of Water Purification; and Mr. James C. Vaughn, Assistant Chief Water Chemical Engineer—both of the Chicago South District Filtration Plant.

The study will commence on January 1, 1958, and will continue through the 1958 calendar year. During this period, each of the twelve participating plants will collect the requested daily operating data and will submit this information to the Public Health Service Regional Office in Chicago. I.B.M. methods will be used for handling the data. A final report will be prepared during the period from January 1, 1959, to June 1, 1959.

Water Supply and Water Pollution Control

Potomac River Pollution Abatement Advances

The November, 1957, News Letter of the Interstate Commission on the Potomac River Basin reports an increasingly optimistic view of pollution abatement progress in that important interstate stream. Mr. David V. Auld, D.C. Director of Sanitary Engineering, is quoted as saying that the new secondary treatment facilities now under construction at the Blue Plains plant represent the "greatest single advance in water pollution control ever made in the Washington Metropolitan Area." When the expanded and improved plant goes into operation in the late summer of 1958, the District and Maryland portion of the total Metropolitan Area sewage load will be reduced from 82 per cent to 63 per cent, with 37 per cent originating on the Virginia side of the River.

The additions to the D.C. Blue Plains plant and thirteen other projects in the Potomac River Basin have received Federal grants for the construction of sewage treatment works under the Federal Water Pollution Control Act—P. L. 660 (84th Congress).

New York City Waterfront Pollution

On October 3, 1957, over radio station WNYC New York City Park Commissioner Robert Moses indicated that pollution of the city's waterfront was one of the most important "if not the most important" problem that his department faces. Mr. Moses, who has pressed repeatedly for a more ambitious anti-pollution program, said the widespread impression that our waterfront pollution difficulties are well on the way to complete removal is "just not so." "People," he said, "shouldn't be lulled into false security about our boundary

waters. Are we waiting for typhoid, sore eyes and ears, or just public revolt against dirty water?"

Metropolitan New Jersey Experiences Record Low in Reservoir Supplies

The New Jersey State Division of Water Policy and Supply warned again that the water level in metropolitan North Jersey's major reservoir systems had reached a record low. At a day-long public hearing on October 3, conducted by the Division, Jersey City officials pleaded for the right to construct a new reservoir in Jefferson Township, Morris County. They agreed that the projected facility, to be known as Longwood, was essential if critical water shortages such as the one recently prevalent in the City were to be eliminated.

Chicago Unable to Obtain Adequate Supply of Fluoride

The City of Chicago has announced that it has been unable to maintain the optimum dosage of 1 ppm. of fluoride in its water supply since the installation of feeding equipment in May, 1956. Its inability to obtain an adequate supply of hydrofluorosilicic acid has been given as the reason for an average fluoride dosage of about 60 per cent of the optimum value. Tests are currently under way on the use of sodium silicofluoride as a means of alleviating the shortage. The chemical supply problem in Chicago has had a marked effect on the Nation's fluoridation program, since this City furnishes over 10 per cent of the water receiving fluoride treatment in the United States.

Water Resources Council, Inc., Attacks Water Pollution

A new all-out fight against pollution of the nation's water resources has been launched by The Water Resources Council, Inc., an organization of 19 national associations representing civic, manufacturing, commercial, technical and conservation groups.

The Council, chartered by New York as a non-profit corporation, came into being last year on the initiative of the equipment manufacturers in the water and sewage works field, who understood the full import of what government agencies described as the "coming water crisis." Other industrial, technical, commercial, civic and professional organizations volunteered their support.

It is the Water Resources Council's belief that water pollution abatement is not so much a matter of needing stronger anti-pollution laws as it is one of winning and keeping public support for the laws we now have. To achieve this, the Council proposes a State-by-State program for alerting the public in these needs and will award pennants and roadside signs to municipalities and manufacturers in order that they may display evidence of their cooperation in eliminating pollution.

National Water Pollution Control Construction Grants Program

Applications to the Public Health Service for Federal grants to assist municipalities in the construction of sewage treatment works continue to pour into State Water Pollution Control Agencies and the Service's Regional Offices at a very high rate. Current indications are that all available funds will be expended early in the present year.

On the basis of applications received by December 1, 1957, present appropriations will support the construction of approximately 1100 municipal

sewage treatment projects. Total applications, approved or in process, on the same date requested Federal grant funds 40 per cent in excess of existing appropriations. In view of the tremendous backlog of sewage treatment plant construction needs and the effect of the grants in stimulating this construction, it is expected that the gap between requested and authorized grant funds will widen rapidly well in advance of the end of the present fiscal year.

The effect of the grant program on new plant construction has been particularly interesting. During the period from 1952 through 1956, contract awards for new plant construction represented 48 per cent of all contract awards for sewage treatment plant construction. However, during the first 11 months of 1957, 75 per cent of all contract awards for projects receiving Federal grants went towards new plant construction. This marked increase in ratio between new plant and total sewage treatment project construction under the Federal grant program is believed to be indicative of the effect of this program in stimulating the abatement of pollution from communities which have heretofore been unable to proceed with the construction of needed sewage treatment works.

New Interstate Compacts

The Merrimack River Valley Flood Control Compact has been ratified by the New Hampshire and Massachusetts Legislatures and approved by the 85th Congress. The organization meeting of the commission administering the Compact is being scheduled. This compact is similar to the Connecticut River Valley Flood Control Compact of 1953 and permits the States to work with the Federal Government coordinating the construction of dams and reservoirs and provides for Massachusetts, which is the downstream State, to reimburse New Hampshire for loss of taxes due to flood control reservoirs constructed in the Granite State.

The Legislatures of Massachusetts and Connecticut have also ratified a Thames River Valley Flood Control Compact as a result of the disastrous flood in 1955. The consent of Congress to the Compact will be requested in January.

Bills now in the 85th Congress for approval of interstate compacts include the Great Lakes Basin Compact, the Tennessee River Basin Water Pollution Control Compact, the Klamath River (California and Oregon), the Bear River Compact (Idaho, Utah and Wyoming) and the Columbia Interstate Compact.

Water Pollution by Pleasure Boats

The American Boat and Yacht Council, Inc., has established a study project for tentative specifications and recommended designs for the treatment of sewage from marine toilets on pleasure boats. The project technical committee recently completed its assignment and the recommended practices and standards covering the subjects of effluent requirements, materials, disinfecting agent, design and construction, and installation have been submitted to the Council.

Gallagher Appointed to Federal Water Pollution Control Advisory Board

Thomas P. Gallagher of Lynn, Massachusetts, sales engineer and distributor of water and sewage works equipment and member of the New England Interstate Water Pollution Control Commission, has recently been appointed to the Federal Water Pollution Control Advisory Board by President Eisenhower.

The 10-member Board, under the chairmanship of Surgeon General LeRoy E. Burney, Public Health Service, acts in an advisory capacity on policy matters relating to the administration of the Federal Water Pollution Control Act of 1956.

Nuclear Science and Engineering

Ohio Appoints First Full-Time Atomic Energy Chief

Governor C. William O'Neill of Ohio has appointed William H. Ells as the first full-time atomic energy chief on the State level. Mr. Ells will be coordinator of atomic development activities for the State of Ohio and will be a member of the State Atomic Energy Advisory Board.

Uranium Mining and Milling Wastes

A four-State conference was held at Cortez, Colorado, October 21-23, to consider interstate problems relating to the disposal of uranium mining and milling wastes. In attendence were State Sanitary Engineers from Utah, Colorado, Arizona, and New Mexico; and Public Health Service sanitary engineers from Washington, Robert A. Taft Sanitary Engineering Center, and the Denver Regional Office. Plans were made for preliminary studies of the extent of the problem and for assistance to the States.

University of North Carolina Conducts Seminar on Radiation and Public Health

The Department of Sanitary Engineering, School of Public Health, University of North Carolina, conducted a three-day seminar on radiation and public health on January 27-29, 1958,

The first two days were devoted to basic theories of radiation, instrumentation and measurement, shielding, and biological effects of radiation. The final day was divided into two separate sessions to serve specialized interests of participants. One related to public health problems concerned with the effect of radiation on milk, food and water, significance of radiation data, X-ray and fluoroscopy, and situation problems. The second session dealt with water and waste problems and covered the efficiency of water and waste treatment processes in removal of radioactive contaminants, special processes for the removal of radioactive contaminants, monitoring programs and instrumentation, and situation problems.

Public Health Service Engineer Assigned to A.E.C. Maritime Reactors Branch

A Public Health Service Sanitary Engineer Officer has recently been assigned to the Atomic Energy Commission's Maritime Reactor Branch, Division of Reactor Development, to advise and assist in the development of methods, procedures, codes, and regulations to govern the operation of nuclear merchant ships. He will assist specifically in the development and review of data concerned with health and safety of passengers, crew, and shoreside personnel involved in nuclear-powered merchant ship operations.

Connecticut Adopts Regulations on Radiation

In pursuit of Public Act No. 154 of 1957, entitled "An Act Concerning the Control of Sources of Ionizing Radiation for the Purpose of Protecting Public Health," The Connecticut State Department of Health has recently promulgated regulations. These regulations have been incorporated in the Sanitary Code of the State as Regulation 287 under the title "Radiation Sources and Radioactive Materials." Copies may be obtained from the State Department of Health, Hartford.

The Connecticut State Department of Health has been conducting a monitoring program on the streams of the State for several years. Massachusetts has a similar program and in view of the many rivers whose drainage basins include portions of both States, the pollution control agencies acting through the New England Interstate Water Pollution Control Commission are now formulating plans for the exchange of data and for the coordination of radiological testing on their respective interstate waters.

Air Pollution

Engineers Joint Council Policy Statement on Air Pollution

In 1955, the Board of the Engineers Joint Council approved the establishment of an Air Pollution Committee to study the implications of air pollution as related to public welfare and the responsibility of the engineering profession in this field of activity. This exploratory group was asked to report its findings with appropriate recommendations to the Board of Engineers Joint Council.

In its report, the Committee agreed that the engineering profession has a responsibility in the solution of the air pollution problems and that a statement recognizing this fact should be prepared. It was decided that the statement should be considered as a guide for those charged with the solution of the problem in their community or geographical region and that its purpose would be to focus the over-all problem with the views of the entire profession on the broad, non-technical policy matters and to define concisely the factors related thereto.

The Committee report was approved by the E.J.C. Board on September 13, 1957, and the resulting Policy Statement was presented at the Annual Meeting of ASCE in New York City on October 15, 1957. This Statement includes a delineation of principles and a review of the general air pollution problem, causes of air pollution, methods of control, and a description of the engineer's function in the control of air pollution.

The common goal of an effective air pollution control program was said to be the maintenance of a reasonable degree of purity of our air consistent with the public health and welfare and public enjoyment thereof, the continued industrial development of the United States, the protection of plant and animal life, and the protection of physical property and other resources. The Statement recognized that the atmosphere is a medium suitable for the disposal of waste products, but declared that true conservation requires that the public interest be protected against excessive and unsafe use of the atmosphere for this purpose.

Emphasis was placed upon the roles of education and voluntary cooperation in the control of air pollution, though it was acknowledged that laws with appropriate penalties may be necessary for cases where cooperation and voluntary action do not prevail. The Council Statement asserted that the objective of air pollution control legislation is to recognize the right to use of the air and the responsibility to avoid its abuse.

The need for continued research in this field was said to be vitally necessary, and it was pointed out that the engineering profession has the obligation of reaching the best engineering solutions to air pollution control problems.

Because engineering involves directing the forces of nature and the activities of man to his own use, convenience and welfare, and in view of cause-and-effect nature of air pollution and the technical nature of its control, the engineering profession is considered by the Engineers Joint Council as qualified and duty bound to contribute substantially to the control of air pollution. The Council Statement concluded that the engineering profession is prepared to discharge its responsibilities in the physical control of air pollution by full participation with other professional disciplines in establishing and effecting sound policies of control.

Symposium on Atmospheric Chemistry

On November 4-6, 1957, a Symposium on Atmospheric Chemistry of Chlorine and Sulfur Compounds was held at the Public Health Services' Robert A. Taft Sanitary Engineering Center. The symposium was jointly sponsored by PHS and the American Geophysical Union, and was attended by approximately 25 scientists from the United States and several foreign countries, including Mexico, Sweden, England, and Australia. The papers and discussions were concerned with both the air pollution aspects of chlorine and sulfur chemistry and the importance of these compounds as components of the atmosphere in general as the result of natural processes.

LETTERS TO THE EDITOR

Comment on Solid Waste Disposal

This is just a short note to comment on your report of findings about ground garbage in the October Journal on page 3-4.

Evidently, some other factor must have entered into the calculations at Cincinnati. I do not see the logic of the results of the findings unless the people who use the grinder make it a special point to throw a tremendously large amount of food wastes into them.

A few years ago, A. M. Rawn, Chief Engineer of the Los Angeles County Sanitation Districts, conducted a controlled study of two subdivisions both very much alike and very close to the same size except that one was supplied with the grinders and the other was not. His studies showed that in a purely domestic sewage, the grinders increase the sewage strength by about 0.05 of a lb. in suspended solids and also in B.O.D. The grease content is increased about 0.03 of a lb. He concluded that a normal community with its usual complement of business and industry would experience its sewage being about 25 per cent stronger in terms of B.O.D. and about 20 per cent stronger in suspended solids if all householders used grinders.

David H. Howells, EDITOR Division Affairs Section, SED Journal 10126 Hereford Place, Silver Spring, Md.

ASSISTANT EDITORS

Professor Gilbert H. Dunstan Dept. Civil Engineering Washington State Inst. Technology Pullman, Washington

Mr. D. G. Larkin 512 Sixteenth Street Oakland 23, California

Mr. John C. McMahon U. S. Public Health Service 69 West Washington St. Chicago 2, Illinois Professor Thomas deS. Furman Dept. Civil Engineering College of Engineering University of Florida Gainesville, Florida

Mr. Walter A. Lyon
Acting Director, Division of Sanitary
Engineering
Pennsylvania Dept. Health
P. O. Box 90, Harrisburg, Pa.

Mr. John B. Powers c/o S. W. Dickey Clay Mfg. Co. P. O. Box 58 Texarkana, Texas Annual Color of the Color of th

NOT THE R.

Later to the state of the state